

# GE Healthcare

## Community Technology Update: Aging in Place



### QuietCare® helps The Wilds of Sand Prairie support “aging in place”

#### Unobtrusive monitoring allows many seniors to remain in assisted living, despite increasing frailty or forgetfulness

In assisted living communities from coast to coast, “aging in place” is becoming an increasingly popular strategy for caring for the elderly. With good reason: according to numerous surveys, over 90 percent of older Americans wish to live out their lives in the place they call home; and for more than a million and counting, that place is an assisted living community.

The most progressive assisted living communities have stepped up to the challenge by creating safer, more responsive care environments. Often this includes adoption of advanced technologies such as QuietCare®, developed to help enhance the quality of life and promote independence for the seniors in their care (see sidebar, page 2).

#### A prime example

The Wilds of Sand Prairie is an excellent example of an assisted living community that is successfully implementing “aging in place,” according to Housing Manager Mary Olson.

With 42 residences, The Wilds is located on the edge of St. Peter, Minnesota, an hour southwest of Minneapolis in the beautiful Minnesota River Valley. It’s a community of Minnesota-based Ecumen, one of the nation’s largest non-profit companies devoted to senior housing and services.

Having embraced “aging in place,” Olson said, this community has expanded its service offerings in recent months to help many of its residents stay right where they are, even as they become more frail – or more forgetful. Where incontinence care, transfer assistance or physical therapy requirements might once have necessitated a move to a skilled nursing facility, she said, that’s no longer true; The Wilds’ residents can now receive such services and many more without leaving the homes they’ve come to love.

One thing has changed, however: Rising acuity levels mean that caregivers must keep a closer eye on residents than ever before.

Fortunately, QuietCare helps The Wilds do just that, Olson said, by providing detailed information to help ascertain each resident’s individual needs and limitations.

“With QuietCare-generated information, we’re able to provide more timely and targeted services to each of our residents. And we’re able to do so without invading anyone’s privacy and without a proportionate increase in staff.”





*QuietCare sensors are placed wherever a resident might benefit from monitoring – at exit doors, in bedrooms, in bathrooms, adjacent to medications, even in refrigerators.*

## Ingenious and unobtrusive

Tailored to meet the requirements of the individual community and resident, QuietCare uses a series of compact wireless motion sensors to learn residents' daily routines in their apartments – and then to document subsequent activity, alerting caregivers to certain deviations from their normal patterns.

For example, QuietCare sensors can be positioned inside and outside the bathroom to detect more frequent or extended bathroom visits, in the bedroom to track delays in getting up in the morning, or at exit doors to alert staff to nighttime wandering. Positioned near medications, these sensors can even help caregivers track whether residents appear to be taking their medications at prescribed intervals.

The data collected by QuietCare are automatically sent to its server for analysis and reporting. This information is accessible to staff via online, password-protected reports available in near real time, as part of daily summary reports emailed to staff members' PCs and delivered to staff pagers as alerts for certain potential emergencies.

The result? A non-intrusive tool that helps give caregivers the knowledge they need to intervene promptly in out-of-the-ordinary situations, enabling directed care that can reduce the risk of accidents and hospitalizations alike. QuietCare reports also help arm administrators with the information needed to determine the care levels that individual residents require, and to make compelling cases for those levels to residents' families.

## Integral to caregiving

Ecumen offered the QuietCare system to The Wilds and some of its other communities after a thorough evaluation of the alternatives and an extensive pilot program, according to Olson. Being a self-described technology junkie, she embraced it eagerly as a potentially important tool to support "aging in place."

It didn't hurt that she was already well-acquainted with the system, having come to The Wilds from another Ecumen community equipped with QuietCare.



*"We're still learning how to take full advantage of [QuietCare's] capabilities. But it has already become an integral part of our daily caregiving routine."*

Sharon Audus, LPN

"It is an invaluable care tool in my previous community," she said, "so I was excited to help bring it on board here at The Wilds."

QuietCare was installed community-wide over the summer of 2008.

"We're still learning how to take full advantage of its capabilities," said Olson's colleague Sharon Audus, LPN. "But it has already become an integral part of our daily caregiving routine."

## Safety first

QuietCare's primary function is to alert caregivers when certain out-of-the-ordinary events occur, Olson said – for instance, an apartment door being opened in the middle of the night, or a resident failing to arise by a designated time in the morning.

When the system detects such an event, it sends an alert to the resident's care assistant – an alert that is also captured electronically for future analysis.

"At my other community, QuietCare alerted our caregivers to potentially dangerous situations," Olson said. "For instance, more than once, middle-of-the-night bathroom alerts led to caregivers finding residents asleep on the toilet – a situation that can lead to an accident or fall."

"We haven't yet had that particular call here at The Wilds," Audus said, "but QuietCare has alerted our caregivers to residents apparently straying from their routines – not leaving the bedroom as usual in the morning, for instance. And it has notified us when a room's temperature has climbed above or fallen below healthful levels."

What's more, by tracking a resident's movement patterns, QuietCare helps The Wilds establish the ideal times for such tasks as toileting assistance. And that helps prevent falls, too, Olson pointed out.

## Healthier residents

Behavioral changes detected by QuietCare have also helped The Wilds' staff to catch and treat potential health problems before they become serious, Audus said.

"If we are notified of a sudden increase in bathroom visits, we don't wait," she said. "It could be a sign of a problem such as urinary tract infection, and we want to get that treated promptly. Especially in cases of cognitive impairment, we can't always count on residents to tell us about increased trips to the bathroom. QuietCare tells us for them."

In one case, QuietCare helped uncover a serious problem in someone who does not complain about health issues. Staff were alerted by QuietCare the next day that the resident had been in

the bathroom nine times the previous night. They then learned that the resident had been up all night vomiting, resulting in hospitalization and cholecystectomy (gall-bladder removal).

The system also helps keep the staff informed about more subtle health issues-in-the-making, Olson added.

"While it can't tell us whether a resident has actually taken his or her medications, it does help us know if he hasn't even touched them," she said. "If this is becoming a problem, it may be time for us to provide medication administration services. And QuietCare helps us make the case for this addition to the families."

## Better quality of life

QuietCare also helps The Wilds make sure that residents are enjoying good nutrition, sleep and personal peace of mind.

"We check our reports daily," Olson said, "looking for changes in behavior that might indicate a problem in these areas."

Take, for instance, a resident who isn't coming down for meals, saying that he makes his own. "We can tell whether or not he's been going into his refrigerator," she said. "It's not definitive, of course, but it does alert us if there's cause for concern."

QuietCare helped the staff discover a resident who was repeatedly checking and rechecking the apartment door, apparently thinking someone was there.

"One night, the door was opened 53 times," Audus said. "Through a subsequent care conference, this information was conveyed to the public health nurse on the case, and then to the resident's physician."

---

**"In cases of cognitive impairment, we can't always count on residents to tell us about increased trips to the bathroom. QuietCare tells us for them."**

Sharon Audus, LPN

---

QuietCare has also helped The Wilds' staff calm the fears of residents who thought that their apartments were being entered while they were out and some of their possessions had been stolen.

"We have been able to show these residents, and their families, that indeed no one had entered their residences while they were away," Olson said. "It can be hard to accept memory loss, but in some cases it's even worse to think that you're being robbed of your privacy or possessions. QuietCare helps us put those fears to rest."

## Preparing for the future

As the landscape of senior care continues to evolve, the women agreed, technology like QuietCare's can play an increasing role in helping the elderly obtain the most appropriate and cost-effective services.

"It's been predicted that hospitals will one day serve primarily as surgical wards and places to get contagious diseases under control," Audus said.

"Nursing homes will assume the rehabilitation responsibilities of today's hospitals. And the majority of eldercare responsibilities will fall upon the shoulders of assisted living professionals."



**"We are committed to helping our residents age in place."**

Mary Olson, Housing Manager

---

"We're happy to take on those responsibilities, especially now that we have tools such as QuietCare to help us fulfill them."

These changes mean that "one size fits all" care programs are a thing of the past, she added. But with the help of this technology, the staff is able to closely monitor residents' behavior patterns, detect even subtle changes in levels of dependence and then carefully tailor the services provided to meet each one's needs.

"We are committed to helping our residents age in place," Olson said. "But in the continuum of care, eventually some may need to move on to a facility offering even more services. For example, since we don't provide memory care, a resident who has begun wandering would require a move to a community set up to address this problem. With QuietCare, we have a much better understanding of when an individual has reached such a point."

## Maintaining community occupancy

Olson anticipates that having QuietCare in place will help keep The Wilds full in the future.

"It's not an issue right now," she said. "We've been running at 100



*Residents at The Wilds of Sand Prairie, a 42-unit Ecumen facility just southwest of Minneapolis, enjoy one of the benefits of retirement community living – the congeniality of friends – out on a sunny patio.* Photo courtesy Ecumen.

percent occupancy with a waiting list since 2006. But it may well become a decisive factor in the years to come, especially as competition increases.”

Olson said she finds value in QuietCare when marketing her community’s capabilities.

“In doing so, I place quite a bit of emphasis – even on our web site – on the technologies we have available.

“As we become home to people who are a little less independent than the traditional assisted living population has been, and as we offer them more services to help keep them safe and healthy, we have two choices: add staff or work smarter. Obviously, we add staff as needed. But we’re also committed to working smarter whenever possible – and QuietCare helps us do just that.”



GE Healthcare  
866.772.8243

[www.gehealthcare.com/quietcare](http://www.gehealthcare.com/quietcare)



imagination at work

© 2009 General Electric Company – All rights reserved.

General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Representative for the most current information.

GE and GE Monogram are trademarks of General Electric Company.

QuietCare is a registered trademark of Living Independently Group, Inc., and is used under license by General Electric Company.